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| 09/771,814 | 01/29/2001 | Giridhar D. Mandyam | NC17123 (NOKI02-17123) | 9514 |
| 30973 | 7590 | 08/25/2004 | EXAMINER | |
| SCHEEF & STONE, L.L.P. 5956 SHERRY LANE SUITE 1400 DALLAS, TX 75225 | | | LELE, TANMAY S | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2684 | 10 |

DATE MAILED: 08/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/771,814

Applicant(s)

MANDYAM, GIRIDHAR D.

Examiner

Tanmay S Lele

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-16 and 18-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-16 and 18-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 January 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7 June 2004 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1 – 16 and 18 – 20 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 4, 5, 7, 10, 16, 18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kamel et al (Kamel US Patent No 6,285,886) in view of Holtzman et al (Holtzman, US Patent No. 6,621,804).

Regarding claims 1 and 16, Kamel teaches of apparatus for a radio communication system and method in which data is communicated between a first communication station (Figure 1, item 10) and a second communication station (Figure 1, item 30) upon a communication channel pursuant to a first communication service (Figure 1), an improvement of

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apparatus for selectably permitting communication of at least a first burst of data by the first communication station to the second communication station pursuant to a second communication service (Figure 1 and column 1, lines 35 – 50 and column 3, lines 18 – 25 and column 9, lines 38 – 46), said apparatus comprising: a detector positioned at the first communication station, said detector for detecting closed-loop power control commands generated during the effectuation of the communication of the data pursuant to the first communication service and detected by said detector (Figure 1 and column 2, lines 33 – 59 and column 11, lines 11 – 19); a measurer coupled to said detector, said measurer for measuring indications of the power control commands during at least a selected time period generated during effectuation of the first communication service (Figures 1 and 2 and column 2, lines 33 – 59 and column 10, lines 42 – 48; note further in starting column 4, line 64 and ending column 5, line 9, the measurer is capable of performing its functions on either channel when indications are available); and a decision maker coupled to said measurer to receive values representative of measured values indications by said measurer of the indications of the power control commands, said decision maker for comparing the values of the measured indications with a threshold value (Figures 1 and 2, and column 3, lines 25 – 45).

Kamel does not specifically teach of for selectably generating a data communication permission command responsive to comparisons made thereat the data communication permission command, when generated, granting permission to the first communication station to communicate the at least the first burst of the data pursuant to the second communication service (though it should be noted that levels of quality are set and that if such targets are not met, communication would not be permitted and further states of different target levels of quality for voice and data, as per column 4, lines 35 – 43).

In a related art dealing with data transmission using supplemental channels, Holtzman teaches of for selectably generating a data communication permission command responsive to comparisons made thereat the data communication permission command, when generated, granting permission to the first communication station to communicate the at least the first burst of the data pursuant to the second communication service (Figures 1 and 2 and column 5, lines 49 –56, column 6, line 13 –24; note further reference is made to power control information in column 6, lines 25 –35).

It would have been obvious to one skilled in the art at the time of invention to have included into Kamel's multi-channel communication system, Holtzman's supplemental channel transmission, for the purposes of utilizing first channel statistics in the determination of providing a secondary channel, thereby reducing system resource processing (brought about from messaging and computation for the second channel), as taught by Holtzman.

Regarding claims 2, Kamel in view of Holtzman teach all the claimed limitations as recited in claim 1. Kamel further teaches of wherein the closed-loop power control commands to which said detector is positioned to detect are of first values to indicate to the first communication station that communication-signal power levels are to be increased and are of second values to indicate to the first communication station that communication-signal power levels are to be decreased (column 10, lines 42 –48 and column 11, lines 11 –20).

Regarding claim 4, Kamel in view of Holtzman teach all the claimed limitations as recited in claim 1. Both Kamel and Holtzman further teach of wherein communications effectuated pursuant to the first communication service include communications effectuated by way of a dedicated air interface link (Kamel: Figure 1 and column 2, lines 18 –25 and Holtzman:

column 6, lines 13 –24) and wherein communication of the at least the first burst of data, permitted responsive to generation of the data communication permission command by said decision maker, is effectuated pursuant to the second communication service (Kamel: column 3, lines 18 –25 and Holtzman: column 5, lines 49 –55).

Regarding claim 5, Kamel in view of Holtzman teach all the claimed limitations as recited in claim 4. Holtzman further teaches of wherein the second communication service, pursuant to which the communication of the at least the first burst of data is permitted responsive to generation of the data communication-permission command by said decision maker, comprises a data delivery service (column 5, lines 49 –55 and column 5, lines 15 –24).

Regarding claim 7, Kamel in view of Holtzman, teach all the claimed limitations as recited in claim 5. Holtzman further teaches of wherein the data delivery service comprises an IP (internet-protocol)-formatted delivery service and wherein the at least the first burst of data, communication of which is selectably permitted responsive to comparisons made by said decision maker, comprises an IP-formatted data burst (column 5, lines 14 –24 and column 5, lines 49 –56).

Regarding claim 10, Kamel in view of Holtzman teach all the claimed limitations as recited in claim 1. Kamel further teaches of wherein the closed-loop power control commands to which said detector is coupled to receive are communicated by the mobile station to the base transceiver station (starting column 10, line 43 and ending column 11, line 20) and both Kamel and Holtzman teach of wherein the radio communication system comprises a cellular communication system operable pursuant to a CDMA (code-division, multiple-access) communication scheme, wherein the first communication station comprises a cellular-system

base transceiver station and the second communication station comprises a cellular-system mobile station (Kamel: column 10, lines 45 –47 and Holtzman: column 6, lines 10 –12).

Regarding claim 18, Kamel in view of Holtzman teach all the claimed limitations as recited in claim 16. Holtzman further teaches of wherein communication of the at least the first data burst, selectably permitted responsive to generation of the communication permission command generated during said operation of selectably generating, is communicated pursuant to a data burst delivery service (column 5, lines 49 –56 and column 5, lines 13 –24).

Regarding claim 20, Kamel in view of Holtzman teach all the claimed limitations as recited in claim 16. The combination of Kamel in view of Holtzman teach of wherein the data communication permission command is generated during said operation of selectably generating when of the indications of the power control commands are beneath the threshold value (Kamel: column 9, lines 2 –12 and column 10, lines 49 – 60; Holtzman: column 5, lines 49 –56; note that indications of power control commands can indicate a high E_b/N_o from the inner closed loop power as described by Kamel and hence above the target level described by Kamel and Holtzman).

5. Claims 11 – 15 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kamel et al (Kamel US Patent No 6,285,886) in view of Holtzman et al (Holtzman, US Patent No. 6,621,804) as applied to claims 1 and 16 above, and further in view of Kim et al. (Kim, US Patent No. 6,512,931).

Regarding claims 11 and 19, Kamel in view of Holtzman teach all the claimed limitations as recited in claims 1 and 16. Kamel teaches of a measurer (starting column 5, line 53 and ending column 6, line 2 and column 6, line 30 –40 and column 11, lines 33 –55) but not specifically of

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said measurer comprises a summer for summing together values of the power control commands during the at least the selected time period (though makes reference to closed loop power control and incremental offsets of power levels starting column 5, line 53 and ending column 6, line 2 and column 6, line 30 –40 and column 11, lines 33 –55).

In a related art dealing with closed loop power control, Kim teaches of said measurer comprises a summer for summing together values of the power control commands during the at least the selected time period (Figures 4 and 5 and starting column 4, line 66 and ending column 5, line 13).

It would have been obvious to one skilled in the art at the time of invention to have included into Kamel and Holtzman's multi-channel transmission system with power control, Kim's closed loop power control bit accumulator, for the purposes of increasing the speed of the power control method while reducing excessive transmission of power, as taught by Kim.

Regarding claim 12, Kamel in view of Holtzman and Kim, teach all the claimed limitations as recited in claim 11. Kim further teaches of wherein a plurality of the power control commands are communicated to the first communication station during the selected time period (Figures 4 and 5 and starting column 4, line 66 and ending column 5, line 13).

Regarding claim 13, Kamel in view of Holtzman and Kim teach all the claimed limitations as recited in claim 12. Kamel, Holtzman, and Kim further teach of wherein the power control commands comprise binary values indicative, alternately, of power-up and power-down commands (Kamel: starting column 5, line 53 and ending column 6, line 2 and column 6, line 30 –40; Holtzman: column 8, lines 22 –27 and Kim: column 3, lines 39 –42) and Kim further teaches of wherein sums summed by said summer define average power control

commands during the selected time period (Figures 4 and 5 and starting column 4, line 66 and ending column 5, line 13).

Regarding claim 14, Kamel in view of Holtzman and Kim teach all the claimed limitations as recited in claim 13. The combination of Kamel in view of Holtzman and Kim further teach of wherein the threshold value with which the summed values formed by the summer of which said measurer is comprised is selected such that summed values that exceed the threshold value prevents generation of the data communication-permission command (Kamel: column 9, lines 2 –12 and column 10, lines 49 – 60; Holtzman: column 5, lines 49 –56 and Kim: column 3, lines 39 – 42; note that Kim's successive power up bits indicate low E_b/N_o from the inner closed loop power as described by Kamel and hence below the target level described by Kamel and Holtzman).

Regarding claim 15, Kamel in view of Holtzman and Kim teach all the claimed limitations as recited in claim 14. The combination of Kamel in view of Holtzman and Kim further teaches of wherein the data communication permission command is generated when the summed values are less than the threshold value (Kamel: column 9, lines 2 –12 and column 10, lines 49 – 60; Holtzman: column 5, lines 49 –56 and Kim: column 3, lines 39 – 42; note that Kim's successive power down bits conversely indicate high E_b/N_o from the inner closed loop power as described by Kamel and hence above the target level described by Kamel and Holtzman).

6. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kamel et al (Kamel US Patent No 6,285,886) in view of Holtzman et al (Holtzman, US Patent No.

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6,621,804) as applied to claim 5 above, and further in view of Bos et al. (Bos, US Patent No. 6,456,857).

Regarding claim 6, Kamel in view Holtzman, teach all the claimed limitations as recited in claim 5. Kamel in view of Holtzman do not specifically teach of wherein the data burst delivery service comprises a WAP (wireless application protocol)-based service and wherein the data burst, communication of which is selectably permitted responsive to comparisons made by said comparator, comprises a WAP-protocol data (though Holtzman teaches of Internet data being sent as per column 5, line 13 –24 and Kamel of data traffic as per column 4, lines 35 –43).

In a related art dealing with terminal capable or accessing multiple feature sets, Bos teaches of wherein the data burst delivery service comprises a WAP (wireless application protocol)-based service and wherein the data burst, communication of which is selectably permitted responsive to comparisons made by said comparator, comprises a WAP-protocol data (column 2, lines 44 – 50 and starting column 4, line 66 and ending column 5, line 6).

It would have been obvious to one skilled in the art at the time of invention to have included into Kamel in view Holtzman's multi-channel voice and data transmission system, Bos' provisions for other standards, for the purposes of creating interoperability in one terminal amongst all available standards (and thus increase user functionality) as taught by Bos.

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kamel et al (Kamel US Patent No 6,285,886) in view of Holtzman et al (Holtzman, US Patent No. 6,621,804) as applied to claim 5 above, and further in view of Thakker et al. (Thakker, US Patent No. 6,487,602).

Regarding claim 8, Kamel in view of Holtzman teach all the claimed limitations as recited in claim 7. Kamel in view of Holtzman do not specifically teach of wherein the radio communication system comprises a cellular communication system which provides for SMS (short message service) messaging, and wherein the data burst, communication of which is selectably permitted responsive to comparisons made by said decision maker, comprises an SMS message.

In a related art dealing with packet data communications, Thakker teaches of wherein the radio communication system comprises a cellular communication system which provides for SMS (short message service) messaging, and wherein the data burst, communication of which is selectably permitted responsive to comparisons made by said decision maker, comprises an SMS message (Figure 1 and column 5, lines 14 –26).

It would have been obvious to one skilled in the art at the time of invention to have included into Kamel and Holtzman's multi-channel voice and data transmission system, Thakker's SMS provisions, for the purposes of obtaining Internet data through an IP-based cellular network without the need of an ISP, as taught by Thakker.

8. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kamel et al (Kamel US Patent No 6,285,886) in view of Holtzman et al (Holtzman, US Patent No. 6,621,804) as applied to claim 7 above, and further in view of Ahmadvand (Ahmadvand, US Patent No. 6,477,670).

Regarding claim 9, Kamel in view of Holtzman, teach all the claimed limitations as recited in claim 7. Kamel in view of Holtzman do not specifically of wherein the IP-formatted delivery service comprises a GUTS (Generalized UDP Transport Service)-formatted service and

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wherein the data burst, communication of which is selectably permitted responsive to comparisons made by said comparator, comprises a GUTS-formatted data burst (though Holtzman teaches of Internet data in column 5, lines 15 – 24)

In a related art dealing with quality of service in UMTS networks, Ahmadvand teaches of of wherein the IP-formatted delivery service comprises a GUTS (Generalized UDP Transport Service)-formatted service and wherein the data burst, communication of which is selectably permitted responsive to comparisons made by said comparator, comprises a GUTS-formatted data burst (column 3, lines 56 – 65).

It would have been obvious to one skilled in the art at the time of invention to have included into Kamel and Holtzman's multi-channel voice and data transmission system, Ahmadvand's protocol, for the purposes of delivering varying levels of quality of service, based on the requested data, as taught by Ahmadvand.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tanmay S Lele whose telephone number is (703) 305-3462. The examiner can normally be reached on 9 - 6:30 PM Monday – Thursdays and on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay A. Maung can be reached on (703) 308-7745. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.


Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Tanmay S Lele
Examiner
Art Unit 2684

tsl
August 19, 2004

 8/21/04

QUOCHIEN B. VUONG
PRIMARY EXAMINER